

ORIGINAL

**IN THE COURT OF COMMON PLEAS
HAMILTON COUNTY, OHIO
CIVIL DIVISION**

KEVIN HUNLEY & JULIE HUNLEY
13478 Service Road
Walton, Kentucky 41094

A 1503649

Case No.

Judge:

Plaintiffs,

**COMPLAINT
& JURY DEMAND**

v.

ABUBAKAR ATIQ DURRANI, M.D.
(Served by Hague Convention)



(ALL NEW DR. DURRANI CASES
SHALL GO TO JUDGE
RUEHLMAN PER HIS ORDER)

Comes now Plaintiffs, Kevin Hunley and Julie Hunley, and files this Complaint and jury

demand and states as follows:

TRACY WINKLER
CLERK OF COURTS
HAMILTON COUNTY OH
2015 JUL -8 P 12:26
FILED

1. At all times relevant, Plaintiffs were residents of and domiciled in the State of Kentucky.
2. At all times relevant, Plaintiffs were married.
3. At all times relevant, Defendant Dr. Abubakar Atiq Durrani (hereinafter "Dr. Durrani") was licensed to and did in fact practice medicine in the State of Ohio.
4. The amount in controversy exceeds the jurisdictional threshold of this Court.
5. The subject matter of the Complaint arises out of medical treatment by Defendants in Hamilton County, Ohio. This Court is thus the proper venue to

grant Plaintiffs the relief sought.

6. This case has been previously 41(A) voluntarily dismissed and now is being re-filed.

FACTUAL ALLEGATIONS OF PLAINTIFF

7. Plaintiff, Kevin Hunley, was involved in an automobile accident in January 2004; due to the accident Plaintiff sustained left C6-7 disc herniation; upon further review a MRI showed that Plaintiff had congenital asymptomatic cervical spinal stenosis.
8. In December 2005, Plaintiff's Doctor, Dr. John Kelly noted that Plaintiff has a thoracic disc bulging that did not appear to be clinically significant.
9. When Plaintiffs saw Dr. Kelly in December, Plaintiff's chief complaint was upper back pain with sharp shooting pains in the mid thoracic region.
10. Kevin Hunley, tried and used conservative treatment to treat his back pain, such as Chiropractor, PT, and injections all with no success.
11. Plaintiffs saw a Dr. Skidmore who advised against surgery because Plaintiff's condition did not warrant it.
12. A Physical Therapist referred Plaintiffs to Dr. Durrani for Plaintiff's neck and mid back pain.
13. Dr. Durrani ordered a CT Guided Stereotactic diagnostic injection in the left T9-T10 intervertebral foramina to discover if Plaintiff got relief.
14. Dr. Durrani told Kevin that if he got relief from the having the injection then Dr. Durrani would recommend a T9-T10 interbody fusion discectomy and instrumentation with anterior approach.

15. Kevin only got relief from the injection for an hour.
16. Upon information and belief, Dr. Durrani told Kevin that the only reason he was performing the surgery was for Kevin's comfort level.
17. On January 31, 2007 Dr. Durrani performed thoracic spinal surgery and spinal fixation discectomy with cage fusion at Christ Hospital.
18. In a letter to a Dr. Dorsch, Dr. Durrani says that a MRI shows a foraminal disk herniation T9-T10 with the compression of the left exiting nerve root; however, the surgery was performed on T10-T11.
19. On the Operative Report Dr. Durrani, for the first time, mentions anything about T10-T11 disk degeneration and then noting in the Pre-operative diagnosis about T9-T10 being herniated or compressed as stated in his office notes. (See exhibit A)
20. The operative report states that lamina and facets were decorticated and packed with Infuse and autograft. (Exhibit A)
21. There are two Operative reports for the same surgery. (See exhibit A and B)
22. The consent form says nothing about Decompression, yet a decompression of the nerve root was performed at T9-T10 and T10-T11. (See exhibit C)
23. The consent form also says nothing about a chest tube being insert into the Plaintiff, yet one was performed on Kevin Hunley.
24. Exhibit B is Dr. Garcia's Operative report, states, "this was done was the left lung was collapsed...the lung was positioned anteriorly and the pleura, using the Harmonic scalpel, was incised over the distance of T9 through T11.

25. Plaintiffs were unaware that anything was being done to T10-T11, even though his initials are on the dated consent form dated 1/31/2007 at 6:15 a.m; additionally the initials on the consent form do not appear to be Kevin Hunley's. (Exhibit C)
26. Plaintiff on August 23, 2007 went to The University Pointe for post-operative examination, the Doctor there discussed a displaced radiopaque spacer and clinical correlation is recommended; however there is not follow up information regarding this information.
27. Following surgery, Plaintiff's pain increased dramatically. Plaintiffs continued to follow up with Dr. Durrani and complain of increasing pain.
28. Currently, Kevin has mistrust in all surgeons due to the behavior of Dr. Durrani.
29. Kevin's pain is now constant with his pain being 6-8 out 10, which occurs on a daily basis.
30. Kevin states that his life has never been the same since Dr. Durrani performed surgery on him.
31. Even simple tasks like taking a shower are difficult for the Plaintiff.
32. Kevin says he feels he has a softball-size knot in the middle of his back with shooting pain encompassing the left side of his body.
33. Kevin has four children and now, due to Dr. Durrani's surgery, he has trouble bending over, if he is able to run a vacuum cleaner his muscles will cramp afterwards, he can't cut the grass, he has severe depression, he experiences short-ness of breath on a regular basis, he often chokes while drinking liquids.

34. Kevin says after surgery he remembers getting a deep chill and cringe type feeling where his whole body became very tense this especially occurs after intercourse, which Plaintiff believes this is an allergic reaction to the BMP.
35. Plaintiff has a family history of Cancer and now, due to the BMP, Plaintiff is seriously concerned about getting Cancer.
36. Plaintiff continues to have pain in his back as well as head and neck aches. He is currently rendered disabled as a result of this surgery.
37. Upon information and belief, Dr. Durrani used Infuse/BMP-2 “off –label” and/or Puregen without Kevin Hunley’s knowledge or consent, causing Mr. Hunley harm.
38. Upon information and belief, the surgery performed by Dr. Durrani was medically unnecessary and improperly performed.
39. As a *direct and proximate result* of Mr. Hunley’s surgery, Dr. Durrani’s negligence, and the Defendant’s negligence, Mr. Hunley has suffered harm.
40. Plaintiffs did not become aware of Infuse/BMP-2 and/or Puregen until he contacted his undersigned counsel.

MORE SPECIFIC ALLEGATIONS BASED UPON DISCOVERY AND

DEPOSITION TESTIMONY

41. This information is to demonstrate the overall negligence and inappropriate actions of Dr. Durrani and the hospitals he worked with and/or for and/or in an individual capacity.

42. Krissy Probst was Dr. Durrani's professional and personal assistant handling professional, academic, travel, surgery scheduling, his journals, his Boards, his credentialing, his personal affairs and his bills.
43. Krissy Probst worked as Dr. Durrani's assistant for three years at Children's Hospital from 2006, 2007, and 2008.
44. Krissy Probst reported Dr. Durrani to Sandy Singleton, the Business Director at Children's for his having an affair with Jamie Moor, his physician assistant.
45. Krissy Probst resigned in 2008 from Dr. Durrani and remained working for three other surgeons in the Orthopedic Department.
46. Krissy Probst worked in the Orthopedic Department for eleven years from 2002-2013. She retired in May, 2013.
47. Krissy Probst confirmed Dr. Durrani claims being a Prince, when he is not.
48. According to Krissy Probst, Dr. Crawford, an icon in pediatric orthopedics treated Dr. Durrani "like a son."
49. According to Krissy Probst, Dr. Crawford, Chief of Orthopedics at Children's unconditionally supported Dr. Durrani no matter the issues and problems Dr. Durrani faced.
50. Dr. Durrani's patient care at Children's Hospital dropped off considerably after Jamie Moor became his physician assistant and they began their affair.
51. Dr. Durrani was the only orthopedic spine surgeon at Children's who would perform a dangerous high volume of surgeries.

52. At Children's, Dr. Durrani would begin a surgery, leave and have fellows and residents complete a surgery or do the full surgery while he was in his office with Jamie Moor, his physician assistant for four or five hours.
53. Children's Board and administration knew about Dr. Durrani doing too many surgeries and not properly doing the surgeries. They did nothing.
54. Dr. Durrani argued to Children's administration when they complained to him that he made them money so Children's tolerated him and allowed him to do what he wanted.
55. Dr. Durrani, when told by Children's that Jamie Moor had to leave, told Children's that he would leave too.
56. Dr. Agabagi would do one spine patient a day at Children's because it takes normally eight hours for a full fusion.
57. Dr. Durrani would schedule two to three spine surgeries a day at Children's.
58. Dr. Durrani would repeatedly have the Business Director, Sandy Singleton, or OR Director allow him to add surgeries claiming they were emergencies when they were not.
59. Dr. Durrani would leave a spine surgery patient for four or five hours in the surgery suite under the care of fellows or residents, unsupervised and sit in his office and check on the surgery as he pleased.
60. Dr. Peter Stern did not like Dr. Durrani while Dr. Durrani was at Children's because he knew all about his patient safety risk issues. Yet, Dr. Stern supported, aided and abetted Dr. Durrani's arrival at West Chester. It defies comprehension, but was for one of the world's oldest motives—greed of money.

61. There is also a Dr. Peter Sturm, an orthopedic at Children's who also had no use for Dr. Durrani.
62. Dr. Durrani chose his own codes for Children's billing which he manipulated with the full knowledge of Children's Board and management.
63. Dr. Durrani was dating and living with Beth Garrett, a nursing school drop-out, with the full knowledge of his wife Shazia.
64. Dr. Durrani was close with David Rattigan until David Rattigan pursued Jamie Moor and Dr. Durrani would not allow David Rattigan in the OR at Children's for a long time.
65. Dr. Durrani, while claiming to have riches, does not. Dr. Durrani's wife's family paid for Dr. Durrani's education and it is her family with the significant wealth.
66. Medtronics paid for Dr. Durrani's trips and paid him \$10,000 fees for speaking or simply showing up at a spine conference.
67. Krissy Probst's business director told her to save all Dr. Durrani related documents and information and she did.
68. While doing research at Children's, Dr. Durrani would misstate facts regarding his research. Children's knew he did this.
69. Dr. Durrani ended on such bad terms with Children's Hospital he was not allowed on the premises after his departure in December 2008, yet he performed a spine surgery there in February 2009.
70. Eric J. Wall, MD was the Director of Surgical Services Division of Pediatric Orthopedic Surgery when Dr. Durrani left Children's.

71. Sandy Singleton, MBA was the Senior Business Director of Surgical Services Division of Pediatric Orthopedic Surgery when Dr. Durrani left Children's.
72. On information and belief, Dr. Durrani used his relationships with Children's officials to purge his Children's file of all patient safety and legal issues which had occurred as part of his departure "deal" which Defendants hide with privilege.

INFUSE/BMP-2

I. BACKGROUND INFORMATION

73. The Deters Law Firm, P.S.C., represents approximately 500 Plaintiffs in medical malpractice actions against a former Northern Kentucky/Cincinnati-area spine surgeon named Abubakar Atiq Dr. Durrani (Dr. Durrani), his company, Center for Advanced Spine Technologies, Inc. (CAST), and several area hospitals including, but not limited to, West Chester Hospital (WCH), University of Cincinnati Health (UC Health), Cincinnati Children's Hospital Medical Center (CCHMC), Christ Hospital, Deaconess Hospital, Good Samaritan Hospital and Journey Lite of Cincinnati, LLC (Journey Lite) (collectively Hospitals).
74. Dr. Durrani performed unnecessary, fraudulent, dangerous, and ultimately damaging surgeries on these Plaintiffs while working for and with these Hospitals.
75. The scheme and artifice to defraud that Dr. Durrani devised, executed, and attempted to execute while working for and with the Hospitals included the following patterns and practices:
 - a. Dr. Durrani persuaded the patient that surgery was the only option, when in fact the patient did not need surgery.

- b. Dr. Durrani told the patient that the medical situation was urgent and required immediate surgery. He also falsely told the patient that he/she was at risk of grave injuries without the surgery.
- c. Dr. Durrani often told his cervical spine patients that they risked paralysis or that his/her head would fall off if he/she was involved in a car accident, ostensibly because there was almost nothing attaching the head to the patient's body.
- d. Dr. Durrani often ordered imaging studies such as x-rays, CT scans, or MRIs for patients but either did not read or ignored the resulting radiology reports.
- e. Dr. Durrani often provided his own exaggerated and dire reading of the patient's imaging study that was either inconsistent with or was plainly contradicted by the radiologist's report. At times, Dr. Durrani provided a false reading of the imaging.
- f. Dr. Durrani often dictated that he had performed certain physical examinations and procedures on patients that he did not actually perform.
- g. Dr. Durrani often ordered a pain injection for a level of the spine that was inconsistent with the pain stated by the patient or with that indicated by the imaging. Dr. Durrani also scheduled patients for surgeries without learning of or waiting for the results of certain pain injections or related therapies.
- h. Dr. Durrani often dictated his operative reports or other patient records months after the actual treatment had occurred.

- i. Dr. Durrani's operative reports and treatment records contained false statements about the patient's diagnosis, the procedure performed, and the instrumentation used in the procedure.
- j. When a patient experienced complications resulting from the surgery, Dr. Durrani at times failed to inform the patient of, or misrepresented the nature of, the complications.
- k. All of the above-mentioned actions were done with the knowledge, cooperation, or intentional ignorance of the Hospitals because Dr. Durrani was one of the biggest moneymakers for the Hospitals.

76. In addition to the civil medical malpractice actions against Dr. Durrani, on August 7, 2013, he was indicted by the Federal Government for performing unnecessary surgeries and for defrauding the Medicare and Medicaid programs. Specifically, the ten-count complaint charged Dr. Durrani with health care fraud, in violation of 18 U.S.C. § 1347, and making false statements in health care matters, in violation of 18 U.S.C. § 1035. There was a subsequent superseding indictment adding over 30 counts.

77. Following these criminal indictments, in December of 2013 and prior to the first Plaintiff's trial in these actions, Dr. Durrani fled the United States and returned to Pakistan. He has not returned to the United States to face allegations of either criminal or civil liability.

78. Among Dr. Durrani's and the Hospitals' professional failings was the use of a synthetic bone-morphogenetic protein called BMP-2, which was marketed under the trade name "Infuse." Dr. Durrani used BMP-2/Infuse in ways that were either not approved by the federal Food and Drug Administration (FDA) or that were

specifically contraindicated as noted on the FDA-approved product labeling. The Defendants had full knowledge of this fact.

79. BMP-2/Infuse was, at the time of the surgeries in question, and currently still is manufactured by a company called Medtronic, Inc. (Medtronic).

80. Dr. Durrani predominantly used BMP-2/Infuse on patients at WCH, which is owned by UC Health.

81. It is Plaintiffs' position that this non-FDA-approved use of BMP-2/Infuse was not only negligent, and fraudulent, but criminal based upon the manner in which it was allowed to be used by Dr. Durrani at West Chester, all with the knowledge and full support of the Defendants.

II. THE PLAYERS REGARDING BMP-2

82. Dr. Durrani is a citizen of the Republic of Pakistan and was a permanent resident of the United States who, from approximately 2005 to 2013, worked as a spine surgeon in and around Cincinnati, Ohio, until he fled the United States to escape civil liability and criminal prosecution.

83. Medtronic is an Irish corporation, with its principal executive office located in Dublin, Ireland, and its operational headquarters located in Minneapolis, Minnesota. Medtronic is the world's third largest medical device company and manufactures and markets BMP-2/Infuse. Medtronic sales representatives were also present during the experimental surgeries performed on Plaintiffs, who are clients of the Deters Law Firm.

84. CAST was a corporation organized under the laws of Ohio and had business and medical offices in Florence, Kentucky and Evendale, Ohio. CAST was owned, in whole or in part, by Dr. Durrani.
85. Bahler Medical, Inc. is a manufacturer of medical implants and is a corporation located in the state of Ohio.
86. David Rattigan is an Ohio resident and was and is a sales representative for Medtronic. Further, he is affiliated with Bahler Medical, Inc., was involved in many of the transactions involving BMP-2, and was present for the experimental surgeries in which BMP-2 was used.
87. West Chester Hospital, LLC is a corporation organized under the laws of Ohio. It provides medical facilities and billing support to physicians, including Dr. Durrani, in the state of Ohio. WCH is owned by UC Health.
88. UC Health is a private, non-profit corporation organized under the laws of Ohio. It provides medical facilities, management, administrative, ancillary, and billing support to physicians, and it owns WCH.
89. CCHMC is a medical facility in Ohio where Dr. Durrani was an employee until approximately 2008.

III. WHAT IS BMP-2/INFUSE?

90. The full name of BMP-2 is “Recombinant Human Morphogenetic Protein-2” (also called rhBMP-2). The following definitions apply:
- a. Recombinant – Artificially created in a lab;
 - b. Morphogenetic – Evolutionary development of an organism;
 - c. Protein – Essential for growth and repair of tissue.

91. Recombinant human protein (rhBMP-2) is currently available for orthopedic usage in the United States.
92. Medtronic manufactured, marketed, sold, and distributed BMP-2 under the trade name “Infuse.”
93. BMP-2 has been shown to stimulate the production of bone.
94. Implantation of BMP-2 in a collagen sponge induces new bone formation and can be used for the treatment of bony defects, delayed union, and non-union.

BMP-2 AS A BIOLOGIC

95. BMP-2 is not a device, but instead it is a biologic. *See* July 2009 American Medical Association Article and 2011 Stanford School of Medicine Article.
96. According to the FDA, “[a] ‘biological product’ means a virus, therapeutic serum, toxin, antitoxin, vaccine, blood, blood component or derivative, allergenic product, or analogous product, or arsphenamine or derivative of arsphenamine (or any other trivalent organic arsenic compound), applicable to the prevention, treatment, or cure of a disease or condition of human beings (Public Health Service ActSec.351(i)1.” Available <http://www.fda.gov/ICECI/Inspections/IOM/ucm122535.htm>.
97. BMP-2 is a Bone-Morphogenetic Protein that is used to promote bone creation and remodeling and falls under the definition of a biologic. *See* AMA article (“bone forming properties”) and Stanford Article. BMP-2 differs from a medical device in that once implanted, it can only be removed days after surgery. If a patient had a complication due to BMP-2 and did not discover this complication

until year after surgery, the patient could not have BMP-2 removed to reduce the complication because BMP-2 is so integrated into the patient's bone.

98. A patient has a right to determine what happens to his or her body and the preservation of that right requires that the patient be informed when a bone growth product, that causes irreversible harm, is placed in his or her body.

WHEN IS IT USED?

99. Recombinant human BMPs are used in orthopedic applications such as spinal fusions, non-unions, and oral surgery.

100. The bone graft contains two parts. The first is a solution of human bone growth protein or morphogenetic protein-2. This protein is found in the human body in small dosages and is important for the healing and formation of bones. The protein is genetically engineered to be utilized in the Infuse Bone Graft product, and it is employed for the stimulation of formation and growth in bones.

101. The second part of the bone graft is an absorbable collagen sponge.

102. Both components of the Infuse Bone Graft structure are used to fill the LT-Cage Lumbar Tapered Fusion Device. This chamber is intended to restore the deteriorated disc space to its original height.

103. FDA-approved use for the Infuse Bone Graft product is only for lower back surgery using an anterior lumbar interbody fusion (ALIF), a technique where the operation on the spine is conducted through the abdomen.

104. In addition, the Infuse Bone Graft product must be used in conjunction with Medtronic's LT-Cage. Use of BMP-2 without the LT-Cage is considered an "off-label" use.

CONTRAINDICATIONS OF USE

105. The FDA specifically warns against the use of Infuse in the cervical spine, citing reports of “life-threatening complications.”
106. Any use of Infuse other than in lumbar spine surgeries with the LT-Cage is considered “off-label” use
107. Infuse should never be used on the skeletally immature patient, i.e., in patients less than 18 years of age or those with no radiographic evidence of epiphyseal closure.
108. Infuse should never be used in the vicinity of a resected or extant tumor.
109. Infuse should never be used in those patients known to have active infection at the surgical site.

RISKS ASSOCIATED WITH OFF-LABEL USE

110. When used in an off-label manner, patients may experience problems with pregnancy, including but not limited to: complications in fetal development; allergic reactions to titanium, bovine type I collagen, or bone morphogenetic protein-2; infection; the creation or intensification of tumors; liver or kidney disease; lupus or human immunodeficiency virus (HIV/AIDS); problems with radiation, chemotherapy, or steroids if a patient is malignant; paralysis; bowel and/or bladder dysfunctions; sexual disorders, including sterilization and incompetence; respiratory failure; excessive bleeding, and; death.

IV. THE REGULATORY PROCESS

111. The Medical Device Amendments (MDA) to the federal Food, Drug, and Cosmetic Act, 21 U.S.C. § 301 et seq., established two

separate approval processes for medical devices: Pre-Market Approval (PMA) and Pre-Market Notification.¹

112. The FDA's PMA process is lengthy and involves extensive investigation by the FDA. The PMA application requires manufacturers to submit extensive animal and human data to establish their devices' safety and effectiveness. 21 C.F.R. § 814.20. Frequently, an experimental program under close FDA scrutiny must be successfully completed before FDA approval can be obtained under this process. FDA regulations also require PMA applicants to submit copies of all proposed labeling for the device. 21 C.F.R. § 814.20(b)(10). The FDA approves a PMA application only after extensive review by the agency and an advisory committee composed of outside experts. 21 C.F.R. § 814.40.²

113. In contrast, the FDA's Pre-Market Notification process is more abbreviated and involves less FDA oversight. This process requires applicants to submit descriptions of their devices and other information necessary for the agency to determine whether the devices are substantially equivalent. Pre-Market Notification applicants must also submit their proposed labeling. 21 C.F.R. § 807.87. If the FDA determines that a device is substantially equivalent to a device that was on the market prior to the enactment of the MDA in 1976, the applicant is free to market the device.

¹ *Fender v. Medtronic*, 887 F.Supp. 1326 fn 1 (E.D. Cal.1995).

² *Fender v. Medtronic*, 887 F.Supp. 1326 fn 1 (E.D. Cal.1995).

114. BMP-2 received PMA (PMA number P000058) for the Infuse/BMP-2 Lumbar Tapered Fusion Device, which PMA provided for limited use with specific requirements for its use on individuals. See Medtronic Package Insert.

SCOPE OF THE PMA AND PRODUCT LABELING

115. The PMA for BMP-2 provided that the product may only be used in patients with the following characteristics:
- d. Skeletally mature patient, AND
 - e. At levels L2-S1, AND
 - f. Confirmed degenerative disc disease (DDD), AND
 - g. Using only an open anterior or anterior laparoscopic approach, AND³
 - h. Six months of non-operative treatment prior to treatment with the device, AND
 - i. In combination with the metallic LT-CAGE.⁴

See Medtronic Package Insert, "INDICATIONS."

116. According to Medtronic's package insert for BMP-2/Infuse as well as other industry literature, the following risks are associated with the use of BMP-2/Infuse:

- A. Male Sterility
- B. Cancer
- C. Increased progression of cancer

³ The anterior interbody fusion approach was developed because the risk of non-union (pseudarthrosis) is significantly higher in posterior approaches. The biggest risk factor for fusion surgery is non-union.

⁴ Instrumented fusions involve hardware and are more stable fusions with a shorter recovery time than non-instrumented fusions.

- D. Suffocation of the cervical region
- E. Bone fracture
- F. Bowel/bladder problems
- G. Loss of spinal mobility or function
- H. Change in mental status
- I. Damage to blood vessels and cardiovascular system compromise
- J. Excessive bone mass blocking the ability to treat pain
- K. Damage to internal organs and connective tissue
- L. Death
- M. Respiratory problems
- N. Disassembly and migration of components
- O. Dural tears
- P. Ectopic and exuberant bone formation
- Q. Fetal development complications (birth defects)
- R. Foreign body (allergic) reaction
- S. Gastrointestinal complications
- T. Incisional complications
- U. Infection
- V. Insufflation complications
- W. Neurological system compromise
- X. Non-union
- Y. Delayed union
- Z. Mal-union

AA. Change in curvature of spine

BB. Retrograde ejaculation

CC. Scars

DD. Tissue and nerve damage

EE. Itching

FF. Pain

GG. Hematoma

HH. Anaphylactic reaction

II. Elevated erythrocyte sedimentation rate

117. Injury Percentages:

j. Ectopic Bone Growth-63%

k. Inflammatory Neuritis-15%

l. Osteolysis/Subsidence-13%

m. Acute Swelling-7%

n. Retrograde Ejaculation-2%

o. 85% of time, BMP-2 implanted in off-label use

118. Not a single one of these risks in the last two paragraphs were ever explained to a single patient at Children's Hospital by Dr. Durrani.

119. BMP-2 was NOT approved by the FDA for use in the cervical and thoracic spine and BMP-2 was NOT safe or approved for use in children less than 21 years of age. These uses are considered "off-label."

“OFF-LABEL” USE

120. A use of a device is considered “off-label” if it is not approved under the Pre-Market Approval process OR cleared for such use pursuant to 21 U.S.C. § 360c(f) (also known as “the 510k premarket notification process”).
121. Infuse can be implanted in an off-label manner in three ways:
- p. Approach/position: Any approach other than an anterior approach;
 - q. Product: Failure to use LT-Cage (or any cage); mixing rhBMP-2 with other grafting products like Allograft or Autograft;
 - r. Discs: Use on multiple levels or on a level outside of L2-S1.
122. Dr. Durrani and the Hospitals in which he performed surgeries repeatedly used BMP-2 in these non-FDA-approved manners.

THE NON-COMPLIANCE WITH THE REGULATORY PROCESS

123. The PMA 000058 “Conditions of Approval” specifies the following condition: “Before making any change affecting the safety or effectiveness of the device, submit a PMA supplement for review and approval by the FDA ... [a] PMA supplement or alternate submission shall comply with applicable requirements under 21 C.F.R. 814.39[.]”
124. 21 C.F.R. 814.39 requires a PMA supplement pursuant to subsection (a)(1) for new indications of use of the device and pursuant to subsection (a)(6) for changes in components.

125. The PMA 000058 “Conditions of Approval” notes the post-marketing reporting requirement imposed by 21 C.F.R. 814.84, particularly “Identification of changes described in 21 C.F.R. 814.39(a).” Medtronic did not comply with this requirement relating to the intended uses and componentry.

126. The FDA can impose post-approval requirements in the PMA pursuant to 21 C.F.R. 814.82, and this fact results in the device being characterized as “restricted” pursuant to 21 U.S.C. § 360j(e) for purposes of 21 U.S.C. § 352(q). Section 352(q) states that any restricted device that is distributed or offered for sale with false or misleading advertising is “misbranded.”

127. “Indications for use” is a necessary part of the PMA application and the “Indications for use” are required to be limited by the application. Any different use is inconsistent with the PMA.

128. A device that fails to meet the requirements of the PMA or 21 C.F.R. 814 is “adulterated” as defined by 21 U.S.C. § 351(f).

129. 21 C.F.R. 801.6 defines a misleading statement related to a DIFFERENT device contained in the label delivered with the device intended to be used will render the device to be used misbranded.

130. Medtronic did not apply for a PMA supplement, as required by the FDA generally and PMA 000058 specifically, for the off-label uses, nor did it provide warnings of the risks known about the off-label uses. All named Defendants in these cases knew about the occurrences of off-label use.

131. The PMA requires an application prior to marketing for new indicated uses by incorporating the federal requirements and explicitly reciting the text of

21 C.F.R. 814.39 and 814.84 and by specifically stating the range of indicated uses on the PMA.

V. MEDTRONIC

132. In or about 2001, Medtronic began preparing for the launch of two spinal fusion products, PYRAMID and INFUSE (BMP-2), which it projected would enjoy broad application with spinal surgeons and their patients on a nationwide basis.

133. Medtronic anticipated that both products would initially be limited in application.

134. Motivated by greed and a desire to gain competitive advantage in the marketplace, Medtronic began a course of conduct designed to broaden the application of both products by end-users. The course of conduct involved fraud, false statements, material misrepresentation, and deceit for the purpose of broadening the sales of these products beyond that which the usual acceptance within the scientific community or regulatory approval would otherwise allow.

135. On or after July 2, 2002, Medtronic received notification that its Pre-Market Approval application for its BMP-2/Infuse bone graft products had been approved by the FDA. However, such approval was limited to the application of the device from the L4 through S1 levels. Further, the approval mandated the conduct of post-approval studies to evaluate the long-term performance of the BMP-2 bone graft and to study the potential side effects and complications such as the promotion of tumors by the bone morphogenetic protein component of

BMP-2. Other studies were conducted as well. See “Allegations against Medtronic in the Unsealed Mississippi False Claims Case.”

136. Medtronic engaged in a fraudulent course of conduct designed to maximize its revenues from BMP-2, regardless of whether it would eventually be allowed to remain on the market.

137. One of the physicians Medtronic co-opted into its fraudulent scheme was a Thomas A. Zdeblick, M.D. Dr. Zdeblick was an orthopedic surgeon whose invention, the LT-Cage, was the only approved device to act as the delivery vehicle for BMP-2 into the body.

138. Dr. Zdeblick enjoyed a position within the scientific community as a Key Opinion Leader, and he was both a practicing orthopedic surgeon and professor at the University of Wisconsin.

139. In one of Dr. Zdeblick’s first attempts to tout his LT-Cage and rhBMP-2, which would become the active ingredient in the ultimate Infuse/BMP-2 product, he encountered some drawbacks to his goal of promoting his and Medtronic’s products, which arose from the policy of certain industry journals, including the journal *Spine*, which followed industry standards before printing peer-reviewed material. See article in the journal *Spine*, published in 2000.

140. Not only were the drawbacks related to industry publishing standards, but the National Consumer Health Information and Health Promotion Act of 1976 enacted certain provisions at 42 U.S.C. § 300u, et seq., whereby the Federal Government had entered the field of medical research publication. Such standards promulgated by the Secretary of the predecessor to the U.S. Department of Health

and Human Services required that applications for grants and contracts must be subject to “appropriate peer review.” See 42 U.S.C. § 300u-1.

141. The drawbacks encountered with the peer-reviewed *Spine* article were as follows:

- a. Attribution that the study was “sponsored by Medtronic Sofamor Danek, Inc.,”
- b. The study was conducted under FDA regulations, and was “...designed as a prospective, multicenter, nonblinded, randomized, and controlled pilot study;” and
- c. It was accompanied by a cautionary comment, or Point of View, which minimized the exuberance and import of the article.

142. In the article, BMP-2 was touted by Zdeblick and the co-authors as the potential realization of a dream of Dr. Marshall Urist, a revered pioneer in the industry and discoverer of BMP, where it closed with the following: “...it is encouraging to note that Marshall Urist’s seminal observation made more than 34 years ago may finally come to clinical fruition.”

143. In the Point of View, a Dr. John O’Brien of London questioned whether there could be long-term problems associated with the product. He treated Zdeblick’s study with caution and pointed out that simple plaster of Paris has achieved the same or similar results more than 50 years prior. He posited that, “[p]erhaps vascularization...fixation procedures are as important as the biochemical composition of the ‘filler.’”

144. Vascularization is achieved through removal of the disc material between two vertebral bodies and then the scraping of the surfaces of the vertebral bodies in a fusion procedure; fixation is the process of securing the motion segment through medical hardware. In other, if the alternative proposed by Dr. O'Brien proved to achieve equivalent or better results, Zdeblick and Medtronic's Infuse/BMP-2 products would be useless and unnecessary.

145. Certain efforts would follow in an attempt to alleviate the drawbacks encountered with the 2000 *Spine* journal article.

146. In 2002, Dr. Zdeblick was installed as the sole editor-in-chief of a medical journal known prior to his installation as the *Journal of Spinal Disorders*. Prior to his installation, the journal enjoyed a fourteen year history under the co-editorship of Dr. Dan Spangler and Dr. Tom Ducker. Once installed, Dr. Zdeblick successfully supplanted Drs. Dan Spengler and Tom Ducker and became the sole editor-in-chief, a position which would enable him to have greater control and would aid his participation in the fraudulent scheme.

147. During this same time period, Dr. Zdeblick also enjoyed a position on the associate editorial board of the medical journal *Spine*, the leading publication covering all disciplines relating to the spine.

148. In one of Dr. Zdeblick's actions as editor-in-chief, he set about re-purposing the journal in a way that would aid him in the furtherance of the fraudulent scheme through the streamlining of the publication process.

149. In furtherance of the fraudulent scheme, Dr. Zdeblick re-purposed the journal and renamed it the *Journal of Spinal Disorders and Techniques* (JSdT),

announcing that the new journal was “entering a new partnership with *Spine*.” As part of this partnership, *Spine* would “continue to function as a broad-based scientific journal” tailored to both clinicians and scientists. However, the *Journal of Spinal Disorders and Techniques* would be directed solely to physicians in clinical practice.

150. Dr. Zdeblick’s stated goal was “to provide a forum for up-to-date techniques...”, and in furtherance of that goal, Dr. Zdeblick announced that his journal would publish Class II or better clinical articles but would “occasionally accept cutting edge articles with less than one year follow-up.” To justify this streamlined process, Dr. Zdeblick claimed as his goal the ability of his journal “to keep up with the fast pace of progress in the treatment of spinal patients.”

151. Arm-in-arm with Medtronic and others, Dr. Zdeblick would in short order abuse his position of trust as the editor-in-chief of JSDT.

152. In the October 2002 edition, JSDT published an article entitled, “Anterior Lumbar Interbody Fusion using rhBMP-2 with Tapered Interbody Cages.” This article was co-authored by, among others, Curtis A. Dickman, M.D., who was a developer of Medtronic’s PYRAMID plate and who has been paid significant sums by Medtronic through royalty agreements, consulting agreements, and education training and speaking agreements.

153. In addition to his interest in the PYRAMID plate, Dr. Dickman had assisted Medtronic in the approval process for Infuse/BMP-2. As part of the pre-approval hearing process, Dr. Dickman and his Barrow Neurological Associates Group of Phoenix, Arizona had submitted a letter to the meeting of the FDA’s

Orthopedics and Rehabilitation Devices Advisory Panel, which met on January 10, 2002. In that letter, Dr. Dickman represented that “approval of BMP would provide a significant advance for patient outcome and satisfaction following spinal fusion.”

154. In the October 2002 issue of JSDT touting the benefits of Infuse/BMP-2, Zdeblick and others failed to disclose their financial ties to Medtronic, though industry standards require such acknowledgement. Not only did Dr. Zdeblick fail to disclose that he profited from each and every surgery which Infuse/BMP-2 was used through rights in the exclusive delivery vehicle, his LT-Cage, but no reference whatsoever to their financial ties to Medtronic was made either by Dr. Zdeblick or Dr. Dickman.

155. For years, the recognized gold standard for spinal bone grafts has been the use of autogenous bone, or bone harvested from the patient’s own iliac crest, or hip bone. Medtronic designed to have its Infuse/BMP-2 product supplant autogenous bone as the gold standard in the medical community, and utilized false statements, a fraudulent enterprise and the support of Federal funds to do so.

156. As part and parcel of Medtronic’s fraudulent scheme, the October 2002 study was published in Dr. Zdeblick’s journal three months after Medtronic received FDA approval for Infuse. As the article shows, it was actually received on March 28, 2002 or after Dr. Zdeblick had accomplished installment as the editor-in-chief, and was accepted by Dr. Zdeblick’s journal for publication on July 30, 2002.

157. At the same time Dr. Zdeblick's journal was publishing the initial article on Infuse, Dr. Zdeblick was already finalizing and preparing for subsequent publication a follow-up article to tout Infuse potentially as the new gold standard. A second article, co-authored by Dr. Zdeblick and two other co-authors of the original article, was entitled "Is Infuse Bone Graft Superior to Autograft Bone? An Integrated Analysis of Clinical Trials using the LT-Cage Lumbar Tapered Fusion Device."

158. This second article was published in Vol. 2 of 2003 and once again, there was no mention of Dr. Zdeblick's financial ties to Medtronic.

159. This second article would serve as the second covert advertisement for the Infuse product, and the article states that "the purpose of our analysis was to investigate the potential statistical superiority of Infuse bone graft to autograft..."

160. This second article went on to announce the July 2002 FDA approval of rhBMP-2.

161. This article included as an "acknowledgment" an expression of gratitude to the physicians "who provided patients for this study and to the clinic research group at Medtronic Sofamor Danek for their help in data collection and statistical analyses." However, the article still failed to advise the medical community that some or all of the authors reaching these conclusions touted as monumental had direct financial interests tied to those conclusions.

162. Rather, the failure to report these clear conflicts of interest on the part of those holding positions of trust both within the medical community and over patients was part of Medtronic's fraudulent enterprise. However, unchecked by

appropriate peer review, Medtronic was able to systematically accomplish their goals.

163. In its 2003 Annual Report, and without recognizing that Zdeblick was being paid by Medtronic, Medtronic cited to Zdeblick's 2003 as reporting that Infuse "...may become the new gold standard in spinal fusion surgery."

164. By its 2006 Annual Report, if not earlier, Medtronic had removed all doubt, declaring that after its introduction in 2002, "Infuse Bone Graft quickly became the gold standard for certain types of lumbar fusion."

165. Medtronic's fraudulent scheme was successful and resulted in a revenue stream ranging from 700 to 900 million dollars per year.

166. It has been reported that around the same time these stories about Infuse were published, editors at the Spine Journal began receiving complaints from doctors around the country who were pointing out contradictions between papers published by doctors with financial ties to Medtronic and other data involving Infuse complications.' See *Journal Sentinel* article of John Fauber.

167. Through the use of these sham consulting, royalty and education/training agreements with its physician agents in this fraudulent enterprise, Medtronic has reaped windfalls in the billions of dollars. Medtronic has used this fraudulent enterprise and civil conspiracy to drive its vast profits and enhance its market position beyond that which it would have realized without engaging willfully, knowingly and potentially deliberate, conscious, or reckless indifference in the fraudulent enterprise and fraudulent concealment. See Mississippi case.

168. Defendants had full knowledge of all these facts pertaining to Medtronics.

VI. FDA PUBLIC HEALTH NOTIFICATION

169. On July 1, 2008 the FDA issued a Public Health Notification entitled “Life-Threatening Complications Associated with Recombinant Human Bone Morphogenetic Protein in Cervical Spine Fusion.”

170. This notification was sent to health care practitioners all across the United States warning of the complications associated with BMP-2, specifically when used in the cervical spine.

171. In the notification the FDA stated they received at least 38 reports of complications during the prior four years with the use of BMP-2 in cervical spine fusions.

172. The complications were associated with swelling of the neck and throat areas, which resulted in compression of the airway and/or neurological structures in the neck.

173. Some reports describe difficulty swallowing, breathing or speaking and severe dysphagia following cervical spine fusion using BMP-2 products had also been reported.

174. The notification further stated that, “since the safety and effectiveness of rhBMP for treatment of cervical spine conditions has not been demonstrated, and in light of the serious adverse events described above, FDA recommends that practitioners either use approved alternative treatments or consider enrolling as investigators in approved clinical studies.

175. The Notification further emphasized the importance of fully informing patients of these potential risks and said that patients treated with BMP-2 in the cervical spine should know:

- s. The signs and symptoms of airway complications, including difficulty breathing or swallowing, or swelling of the neck, tongue, mouth, throat and shoulders or upper chest area
- t. That they need to seek medical attention immediately at the first sign of an airway complication
- u. That they need to be especially watchful 2-14 days after the procedure when airway complications are more likely to occur
- v. rhBMP-2 (contained in Infuse Bone Graft) has received pre-market approval for fusion of the lumbar spine in skeletally mature patients with degenerative disc disease at one level from L2-S1 and for healing of acute, open tibial shaft fractures stabilized with an IM nail and treated within 14 days of the initial injury

176. Additionally, BMP is not approved in any manner for use in patients who are skeletally immature (<18 years of age) or pregnant.

177. Dr. Durrani and the Hospitals ignored ALL of these warnings and used BMP-2 in cervical spine surgeries, children, and those with known compromising factors such as osteoporosis, smoking, and diabetes.

178. Furthermore, the Notification stated that the FDA requires hospitals and other user facilities to report deaths and serious injuries associated with the use of medical devices.

179. The Hospitals that allowed Dr. Durrani to use BMP-2 in their facilities failed to report any complications resulting from his use of BMP-2.

VII. SENATE FINANCE COMMITTEE REPORT

180. Medtronic's actions did not go unnoticed, and in June of 2011 the Senate Finance Committee began an investigation into the fraudulent actions of Medtronic.

181. Medtronic produced more than 5,000 documents pertaining to 13 different studies of BMP-2 for the investigation.

182. On October 25, 2012, Senate Finance Committee Chairman Max Baucus (D-Mont.) and senior member Chuck Grassley (R-Iowa) released the results of their 16-month investigation into Medtronic, which revealed questionable ties between the medical technology company and the physician consultants tasked with testing and reviewing Medtronic products.

183. The investigation revealed that Medtronic employees collaborated with physician authors to edit and write segments of published studies on BMP-2/Infuse without publicly disclosing this collaboration.

184. These fraudulently-produced studies may have inaccurately represented BMP-2's risks and may have placed added weight on the side effects of alternative treatments.

185. The Senate investigation further found that Medtronic also maintained significant, previously undisclosed financial ties with physicians who authored studies about BMP-2, making \$210 million in payments to physicians over a 15-year period.

186. Senator Baucus stated, “Medtronic’s actions violate the trust patients have in their medical care. Medical journal articles should convey an accurate picture of the risks and benefits of drugs and medical devices, but patients are at serious risk when companies distort the facts the way Medtronic has. Patients everywhere will be better served by a more open, honest system without this kind of collusion.”

187. Senator Grassley stated, “The findings also should prompt medical journals to take a very proactive approach to accounting for the content of the articles along with the authorship of the articles and the studies they feature. These publications are prestigious and influential, and their standing rests on rigorous science and objectivity. It’s in the interest of these journals to take action, and the public will benefit from more transparency and accountability on their part.”

188. Major findings of the investigation include:

- a. Medtronic was involved in drafting, editing, and shaping the content of medical journal articles authored by its physician consultants who received significant amounts of money through royalties and consulting fees from Medtronic. The company’s role in authoring or substantially editing these articles was not disclosed in the published articles. Medical journals should ensure that any industry role in drafting articles or contributions to authors is fully disclosed.

- b. Medtronic paid a total of approximately \$210 million to physician authors of Medtronic-sponsored studies from November 1996 through December 2010 for consulting, royalty and other arrangements.
- c. An e-mail exchange shows that a Medtronic employee recommended against publishing a complete list of adverse events, or side effects, possibly associated with BMP-2/Infuse in a 2005 *Journal of Bone and Joint Surgery* article.
- d. Medtronic officials inserted language into studies that promoted BMP-2 as a better technique than an alternative by emphasizing the pain associated with the alternative.
- e. Documents indicate that Medtronic prepared one expert's remarks to the FDA advisory panel meeting prior to BMP-2 being approved. At the time, the expert was a private physician but was later hired to be a vice president at Medtronic in 2007.
- f. Medtronic documents show the company successfully attempted to adopt weaker safety rules for a clinical trial studying BMP-2 in the cervical spine that would have allowed the company to continue the trial in the event that patients experienced severe swelling in the neck.

VIII. YODA STUDY

189. In response to the various controversies surrounding BMP-2/Infuse, including a June 2011 article in the journal *Spine*, the Yale University Open Data Access (YODA) team reached an agreement for Medtronic to provide full

individual participant data from all their trials of rhBMP-2 and allow unrestricted independent re-analysis of this data.

190. The YODA study involved research teams at two universities – the University of York and the Oregon Health and Science University.

191. The review focused exclusively on the use of rhBMP-2 in patients undergoing spinal fusion surgery for treatment of degenerative disc disease, spondylolisthesis, or any other relevant spinal condition.

192. The three main objectives of the study were: 1) to examine the potential benefits of BMP-2, 2) to examine the potential harms of BMP-2, and 3) to assess the reliability of the published evidence base.

193. Medtronic submitted data from 17 studies, including 12 randomized controlled trials (RCTs).

194. In total, the YODA study analyzed the data from 1,409 participants.

195. Though the results showed moderate success with fusions as a result of BMP-2, the study found that BMP-2 results in several different complications including: arthritis, implant-related events, retrograde ejaculation, wound complications, and neurological, urogenital, and vascular events.

196. In regard to the alleged tampering with the peer-reviewed studies by Medtronic, the YODA study found that only two out of twenty peer-reviewed journal publications reported a comprehensive list of all adverse events that occurred during the studies.

197. Furthermore, the way in which adverse event data was presented in the literature was inconsistent, and the rationale for presenting some adverse events but not others was rarely clear.

198. The study concluded that for the period up to 24 months after surgery, treatment with BMP-2 increases the probability of successful fusion (according to Medtronic definitions and reports, which the study noted “were subjective so it is not possible to confirm whether reported successful fusions truly were successful” see YODA Study, p. 35) but this does not translate to clinically meaningful benefits in pain reduction, function, or quality of life. The small benefits in these outcomes observed from six months onward come at the expense of more pain in the immediate post-operative period and a possible increased risk of cancer.

199. Even more relevant to the case against Dr. Durrani and the Hospitals is the YODA study’s conclusion that, “[i]t is very important that these findings are expressed clearly and discussed with patients so that they can make informed choices about the type of surgery they would prefer.” *Id.*

200. The University of Oregon Study determined that Infuse/BMP-2 is not better than Autograft, while the University of York study determined that Infuse/BMP-2 offers only a slight and not statistically significant advantage over Autograft.

201. The YODA study concluded that Medtronic “misrepresented the effectiveness and harms through selective reporting, duplicate publication, and underreporting.”

202. Adverse event categories such as heterotopic bone formation, osteolysis, and radiculitis were not included in participant databases or internal reports; therefore, the safety profile was not fully assessed.
203. The YODA study further concluded that Medtronic was involved in drafting, editing, and shaping the content of medical journal articles on Infuse/BMP-2 authored by its physician consultants who received significant amounts of money through royalties and consulting fees from Medtronic. The company's significant role in authoring or substantively editing these articles was not disclosed in the published articles.
204. Medtronic paid a total of approximately \$210 million to the physician authors of Medtronic-sponsored studies on Infuse from November 1996 through 2010 for consulting, royalty and other arrangements.
205. An email exchange showed that a Medtronic employee recommended against publishing a complete list of adverse events or side effects possibly associated with Infuse in a 2005 *Journal of Bone and Joint Surgery* article.
206. Medtronic officials inserted language into studies that promoted Infuse as a better technique than an alternative procedure by overemphasizing the pain associated with the alternative procedure.
207. Medtronic's actions violated the trust patients have in their medical care. Medical journal articles should convey an accurate picture of the risks and benefits of drugs and medical devices, but patients are at serious risk when companies distort the facts the way Medtronic has. See United States Senate Committee on Finance, October 2012.

208. Infuse was intended for a single level anterior lumbar interbody fusion performed with all three components in a specific spinal region. The three components are a tapered metallic spinal fusion cage (NOT PLASTIC), a recombinant human (BMP) bone Morphogenetic Protein, and a carrier/scaffold for the BMP and resulting bone. The Infuse product is inserted into the LT-CAGE Lumbar tapered Fusion Device component to form the complete Infuse Bone Graft/LT-Cage Lumbar Tapered Fusion Device. These components must be used as a system. The Infuse Bone Graft component must not be used without the LT-Cage Lumbar Tapered Fusion Device component.

209. BMP-2 is not supposed to be used in minors.

210. BMP-2 is not supposed to be used with smokers and diabetics because of vascular slowing.

211. BMP-2 should not be used with women in child bearing years.

212. BMP-2 is contraindicated for patients with a known hypersensitivity to rhBMP-2 and should not be used in the vicinity of a resected or extant tumor, in patients with active malignancy, or in patients undergoing treatment for a malignancy.

IX. DR. DURRANI AND BMP-2

213. Despite all of these warning signs, Dr. Durrani, with the full knowledge of the Defendants, continued to use BMP-2 in ways not approved by the FDA, or in an “off-label” manner.

214. As early as 2007, Dr. Durrani and UC Health knew there were issues with BMP-2 because insurance companies such as Anthem were refusing to pay for BMP-2.

215. Medtronic provided in writing to Dr. Durrani and CAST the approved uses for Infuse/BMP-2.

216. However, Dr. Durrani and the Defendants continued to use BMP-2 in off-label ways, including but not limited to:

- a. Using BMP-2/Infuse in children, despite Medtronic specifically requiring it be used only in “skeletally mature patients;”
- b. Using it outside the L2-S1 level of the spine;
- c. Ignoring the requirement that BMP-2/Infuse only be used for Grade 1 spondylolisthesis or Grade 1 retrolisthesis;
- d. Not requiring at least six months of non-operative treatment prior to the use of BMP-2/Infuse;
- e. Using BMP-2/Infuse without the required cage;
- f. Not using the “carrier scaffold” in conjunction with BMP-2/Infuse as required;
- g. Using BMP-2/Infuse without proper training despite Medtronic’s warning, “Caution: Federal (USA) law restricts this device to sale by or on the order of a physician with appropriate training or experience.”

217. Dr. Durrani was a paid consultant for Medtronic.

218. According to Dr. Durrani's own deposition testimony in several cases, Medtronic required one of their representatives to be present in the operating room when its product BMP-2/Infuse is used.

219. Because Medtronic representatives were present in these surgeries, Medtronic knew when Dr. Durrani used BMP-2/Infuse outside the approved uses according to Medtronic's own guidelines.

220. Dr. Durrani was encouraged by Medtronic to obtain peer review and published studies from Medtronic sales representatives to support his use of BMP-2/Infuse.

221. Dr. Durrani was encouraged by Medtronic to be an advocate for his patients and describe how BMP-2/Infuse technology can benefit them.

222. When asked how he got his Medtronic grant, Dr. Durrani responded, "You apply to the Medtronic's corporate and say this is what we want to do, like everybody else in the country applies, and then they come and evaluate the thing and say, "Okay, we think it's worthy. We'll give you the grant."

223. In regard to his role as a Medtronic consultant, Dr. Durrani stated, "If there are certain products that they help us in developing, then they will come to us for a certain consultant role for a certain product development."

224. Dr. Durrani also stated, "I was involved in the development of the minimally invasive spine instrumentation."

225. Dr. Durrani gave conflicting reports on his financial relationship with Medtronic.

226. In a deposition, when asked when his relationship with Medtronic began, Dr. Durrani responded “2000-it’s 2003, ’04. Something in that category. I’m not sure. It’s on the Medtronic website. You can go look at it.”

227. Medtronic’s website has no information regarding their relationship with Dr. Durrani.

228. In another deposition, Dr. Durrani stated he began his relationship with Medtronic in “2005 or ’06.”

229. Dr. Durrani also gave conflicting reports on how much compensation he received from Medtronic for his consultation services.

230. In one deposition, Dr. Durrani stated in response to an inquiry as to how much payment he received, “It’s a standard compensation. Again, it’s on the website, how much they’ve paid us.”

231. Again, this information is not available on the Medtronic website.

232. In another deposition, when asked if he received income from Medtronic, Dr. Durrani replied, “No, I don’t.”

233. When questioned further if he received a fee as a consultant, he stated, “If you do a work, there is a contractual obligation that they have to pay you. As I told you in my last deposition, they did declare it on their website, so you can actually go on the website and see how much they paid.”

234. In another deposition, Dr. Durrani stated that he received, “less than \$10,000 in ten years” from Medtronic.

235. An email dated July 30, 2008 from Medtronic Senior Product Manager Katie Stamps to Dr. Durrani states that she “is in the process of working on the

renewal of your [Dr. Durrani's] consulting agreement." As stated, this information is not available on Medtronic's website, nor is any information relating to Dr. Durrani's role as a consultant for Medtronic.

236. A CCHMC packet relating to its Orthopedics department indicated that Dr. Durrani received \$60,000 in grants, contracts, or industry agreements from Medtronic Sofamor Danek in FY 2008.

237. Financial information discovered concerning Dr. Durrani's relationship with Medtronic was found in Dr. Durrani's biography on the website for the Orthopaedic & Spine Institute, which Dr. Durrani currently operates in Pakistan. The biography states that "Dr. Atiq Dr. Durrani has also received the Clinical Spine Fellowship Grant by the Department of Orthopaedic Surgery which was funded by Medtronic Sofamor Danek with a budget of \$59,170 per year." See <http://www.osi.com.pk/doctor/dr-atiq-Dr. Durrani-md/>.

238. When a request was made to Medtronic regarding its affiliation with Dr. Durrani, the Medtronic Supplier Relations Team stated that Dr. Durrani's "name [is] not listed in our system."

239. Medtronic further responded to the Deters Law Firm's request that the firm would need a "Vendor I.D. Number," which neither Medtronic nor any other party has provided.

240. David Rattigan, was Dr. Durrani's main Medtronic representative from Bahler Medical.

241. David Rattigan and Medtronic have the same lawyer. Despite the Deters Law Firm's willingness to cooperate in scheduling the date for a deposition, they have refused until recently. Mr. Rattigan's deposition was taken June 5, 2015.

242. In summary, clients of the Deters Law Firm, with the full knowledge and intentional consent of all Defendants, became unsuspecting experiments for real world testing of Medtronic hardware and BMP-2, by and through Dr. Durrani and CAST, who had secret financial connections to Medtronic, improper motives, and submitted false claims. The government paid for many of these improper and unregulated experiments as a result of the false claims made by Dr. Durrani, with the knowledge of Medtronic, under the veil of "medically necessary" surgeries.

243. Despite repeated requests, Medtronic has refused to cooperate in providing any requested information and is actively downplaying their connections to Dr. Durrani.

X. THE DEFENDANTS AND BMP-2

244. The purpose of the background information on the following Defendants and BMP-2 concerning other hospitals is to show the egregious methods, which upon information and belief were used at all hospitals.

245. The Defendants allowed and encouraged these practices by Dr. Durrani for the sole purpose of money and greed.

246. David Rattigan was always present in Dr. Durrani's operating rooms as a representative of Medtronic.

247. David Rattigan's sole job was to deliver the BMP-2/Infuse to the Hospitals and make sure that it was inserted correctly into the patient.

248. David Rattigan's presence in the OR further supports the Defendants awareness of Dr. Durrani's fraudulent use of BMP-2/Infuse.

249. **Informed Consent for Surgical or Medical Procedure and Sedation:**

It is the responsibility of the attending physician to obtain informed consent prior to the procedure. The patient, or his/her representative, will be advised by his/her physician of:

- a. The explanation of the procedure
- b. The benefits of the procedure
- c. The potential problems that might occur during recuperation
- d. The risks and side effects of the procedure which could include but are not limited to severe blood loss, infection, stroke or death.
- e. The benefits, risks and side effect of alternative procedures including the consequences of declining this procedure or any alternative procedures.
- f. The likelihood of achieving satisfactory results

Completion of the "Consent to Hospital and Medical Treatment" form to examine and treat is NOT sufficient as consent to perform a surgical procedure, invasive procedure, or for medical regimens of substantial risk or that are the subject of human investigation or research.

250. The Defendants had the responsibility to carry out these consent rules.

251. Dr. Durrani oftentimes used BMP-2 "off-label" when performing surgeries.

252. BMP-2 is manufactured, marketed, sold and distributed by Defendant Medtronic under the trade name "Infuse."

253. Dr. Durrani is a consultant for Medtronic.

254. Defendants did not inform Plaintiffs of Durrani's financial interest, conflicts of interest or consulting arrangement with Medtronic.

255. Medtronic, provided in writing to Dr. Durrani the approved uses for BMP-2, the substance also referred to as Infuse, which is a bone morphogenic protein, used as an artificial substitute for bone grafting in spine surgeries.
256. BMP-2 is not approved by the Food and Drug Administration for use in the cervical and thoracic spine.
257. BMP-2 is neither safe nor approved for use on children less than twenty one (21) years of age.
258. For use in spinal surgery, BMP-2/Infuse is approved by the FDA for a limited procedure, performed on a limited area of the spine, using specific components. Specifically, the FDA approved Infuse for one procedure of the spine: Anterior Lumbar Interbody Fusion ("ALIF" or "Anterior" approach); and only in one area of the spine: L4 to S1; and only when used in conjunction with FDA-Approved Components: LT-CAGE Lumbar Tapered Fusion Device Component ("LT-CAGE")
259. Use of Infuse in cervical or thoracic surgery, or use through the back (posterior), or side (lateral), or on areas of the spine outside of the L4-S1 region (e.g., the cervical spine), or using components other than or in addition to the LT-CAGE is not approved by the FDA, and thus such procedures and/or use of non-FDA approved componentry is termed "off-label."
260. When used off-label, Infuse frequently causes excessive or uncontrolled (also referred to as "ectopic" or "exuberant") bone growth on or around the spinal cord. When nerves are compressed by such excessive bone growth, a

patient can experience, among other adverse events, intractable pain, paralysis, spasms, and cramps in limbs.

261. The product packaging for BMP-2/Infuse indicates it causes an increased risk of cancer four (4) times greater than other bone graft alternatives.

262. Dr. Durrani and Children's Hospital personnel did not disclose to Plaintiffs their intent to use BMP-2/Infuse, and further, did not disclose their intent to use BMP-2/Infuse in a way not approved by the FDA.

263. Dr. Durrani used BMP-2 in Jacob Feltner in a manner not approved by Medtronic or the FDA.

264. Defendants did not inform Plaintiffs that Dr. Durrani used Infuse/BMP-2 in his surgeries.

265. Plaintiffs would not have allowed BMP-2 to be used by Dr. Durrani in his surgery in a manner that was not approved by the FDA or Medtronic, Infuse/BMP-2's manufacturer.

266. Plaintiffs would not have consented to the use of BMP-2 in Jacob Feltner's body if informed of the risks by Dr. Durrani or any Children's Hospital personnel.

267. The written informed consent of Dr. Durrani signed by Plaintiffs lacked the disclosure of Infuse/BMP-2's use in his procedures.

268. Plaintiffs never received a verbal disclosure of Infuse/BMP-2 from Dr. Durrani or any Children's Hospital personnel.

269. Medtronic specifically required Infuse/BMP-2 only be used in "skeletally mature patients" with degenerative disc disease.

270. Medtronic required at least six (6) months of non-operative treatment prior to use of Infuse/BMP-2.
271. Dr. Durrani regularly used Infuse/BMP-2 without this six (6) month non-operative treatment.
272. Medtronic required BMP-2 always be used in conjunction with a metal LT cage.
273. Dr. Durrani regularly used BMP-2 without a proper LT cage in his surgeries.

INFUSE/BMP-2

274. Dr. Durrani oftentimes used BMP-2 “off-label” when performing surgeries.
275. BMP-2 is manufactured, marketed, sold and distributed by Defendant Medtronic under the trade name “Infuse.”
276. Dr. Durrani is a consultant for Medtronic.
277. Defendants did not inform Plaintiff of Durrani's financial interest, conflicts of interest or consulting arrangement with Medtronic.
278. Medtronic, provided in writing to Dr. Durrani and CAST the approved uses for BMP-2, the substance also referred to as Infuse, which is a bone morphogenic protein, used as an artificial substitute for bone grafting in spine surgeries.
279. BMP-2 is not approved by the Food and Drug Administration for use in the cervical and thoracic spine.

280. BMP-2 is neither safe nor approved for use on children less than twenty one (21) years of age.
281. For use in spinal surgery, BMP-2/Infuse is approved by the FDA for a limited procedure, performed on a limited area of the spine, using specific components. Specifically, the FDA approved Infuse for one procedure of the spine: Anterior Lumbar Interbody Fusion ("ALIF" or "Anterior" approach); and only in one area of the spine: L4 to S1; and only when used in conjunction with FDA-Approved Components: LT-CAGE Lumbar Tapered Fusion Device Component ("LT-CAGE")
282. Use of Infuse in cervical or thoracic surgery, or use through the back (posterior), or side (lateral), or on areas of the spine outside of the L4-S1 region (e.g., the cervical spine), or using components other than or in addition to the LT-CAGE is not approved by the FDA, and thus such procedures and/or use of non-FDA approved componentry is termed "off-label."
283. When used off-label, Infuse frequently causes excessive or uncontrolled (also referred to as "ectopic" or "exuberant") bone growth on or around the spinal cord. When nerves are compressed by such excessive bone growth, a patient can experience, among other adverse events, intractable pain, paralysis, spasms, and cramps in limbs.
284. The product packaging for BMP-2/Infuse indicates it causes an increased risk of cancer four (4) times greater than other bone graft alternatives.

285. Dr. Durrani and his staff and employees, and Christ Hospital personnel did not disclose to Plaintiff their intent to use BMP-2/Infuse, and further, did not disclose their intent to use BMP-2/Infuse in a way not approved by the FDA.

286. Dr. Durrani used BMP-2 in Plaintiff in manners not approved by Medtronic or the FDA.

287. Defendant's did not inform Plaintiffs that Dr. Durrani used Infuse/BMP-2 in his surgeries.

288. Plaintiffs would not have allowed BMP-2 to be used by Dr. Durrani in his surgeries in a manner that was not approved by the FDA or Medtronic, Infuse/BMP-2's manufacturer.

289. Plaintiffs would not have consented to the use of BMP-2 in his body if informed of the risks by Dr. Durrani, his staff and employees, or any Christ Hospital personnel.

290. The written informed consent of Dr. Durrani, signed by Plaintiffs lacked the disclosure of Infuse/BMP-2's use in Plaintiffs procedure.

291. Plaintiffs never received a verbal disclosure of Infuse/BMP-2 from Dr. Durrani, his staff and employees, or any Christ Hospital personnel.

292. Medtronic specifically required Infuse/BMP-2 only be used in "skeletal mature patients" with degenerative disc disease.

293. Medtronic required at least six (6) months of non-operative treatment prior to use of Infuse/BMP-2.

294. Dr. Durrani regularly used Infuse/BMP-2 without this six (6) month non-operative treatment.

295. Medtronic required BMP-2 always be used in conjunction with a metal LT cage.

296. Dr. Durrani regularly used BMP-2 without a proper LT cage in his surgeries.

PUREGEN

297. Dr. Durrani oftentimes used Puregen when performing surgeries.

298. Puregen is a product produced by Alphatec Spine.

299. Dr. Durrani was and is a paid consultant for Alphatec Spine.

300. Dr. Durrani has an ownership stake in the Alphatec Spine.

301. Puregen has never been approved by the FDA for any human use.

302. Puregen is now removed from the market for any use.

303. Dr. Durrani used the product Puregen as bone graft substitute similar to Infuse/BMP-2 during spinal surgeries.

304. Dr. Durrani, his staff and employees, and Christ Hospital personnel did not disclose their intent to use Puregen, nor did they inform Plaintiffs that it was a product that was not approved by the FDA for human use.

305. Dr. Durrani used Puregen in Plaintiff in manners not approved by the FDA.

306. Plaintiff was not informed by Dr. Durrani that Dr. Durrani used Puregen in Plaintiff's surgeries.

307. Plaintiff would not have allowed Puregen to be used by Dr. Durrani in Plaintiff's surgery in a manner that was not approved by the FDA.

308. Plaintiff would not have consented to the use of Puregen in Plaintiffs body if informed of the risks by Dr. Durrani, his staff and employees, or any Christ Hospital personnel.

309. The written informed consent of Dr. Durrani signed by Plaintiff lacked the disclosure of Puregen's use in Plaintiffs procedures.

310. Plaintiff never received a verbal disclosure of Puregen from Dr. Durrani, or his staff and employees, or any Christ Hospital Personnel.

DR. DURRANI COUNTS:

COUNT I: NEGLIGENCE

311. Defendant Dr. Durrani owed his patient, Plaintiffs, the duty to exercise the degree of skill, care, and diligence an ordinarily prudent health care provider would have exercised under like or similar circumstances.

312. Defendant Dr. Durrani breached his duty by failing to exercise the requisite degree of skill, care and diligence that an ordinarily prudent health care provider would have exercised under same or similar circumstances through, among other things, negligent diagnosis, medical mismanagement and mistreatment of Plaintiffs, including but not limited to improper selection for surgery, improper performance of the surgeries, and improper follow-up care addressing a patient's concerns.

313. As a direct and proximate result of the aforementioned negligence and deviation from the standard of care on the part of the Defendant Dr. Durrani, Plaintiffs sustained all damages requested in the prayer for relief.

COUNT II: BATTERY

314. Dr. Durrani committed battery against Plaintiff by performing surgeries that were unnecessary, contraindicated for Plaintiff's medical condition, and for which he did not properly obtain informed consent, inter alia, by using Infuse/BMP-2, PureGen and/or Baxano in ways and for surgeries not approved by the FDA and medical community, and by the failure to provide this information to Plaintiff.

315. Plaintiffs would not have agreed to the surgeries if he knew the surgeries were unnecessary, not approved by the FDA, and not indicated.

316. As a direct and proximate result of the aforementioned battery by Dr. Durrani, Plaintiffs sustained all damages requested in the prayer for relief.

COUNT III: LACK OF INFORMED CONSENT

317. The informed consent forms from Dr. Durrani, which they required Plaintiff to sign, failed to fully cover all the information necessary and required for the procedures and surgical procedures performed by Dr. Durrani. Dr. Durrani required an informed consent release to perform surgery.

318. In addition, no one verbally informed Plaintiffs of the information and risks required for informed consent at the time of or before the Plaintiff's surgery.

319. Dr. Durrani failed to inform Plaintiffs of material risks and dangers inherent or potentially involved with Plaintiffs surgery and procedures.

320. Plaintiffs subsequently developed severe and grievous injuries as a direct and proximate result of lack of informed consent.

321. Had Plaintiffs been appropriately informed of the need or lack of need for surgery and other procedures and the risks of the procedures, Plaintiffs would not have undergone the surgery or procedures.

COUNT IV: INTENTIONAL INFLICTION OF EMOTIONAL DISTRESS

322. Dr. Durrani's conduct as described above was intentional and reckless.

323. It is outrageous and offends against the generally accepted standards of morality.

324. It was the proximate and actual cause of Plaintiff's psychological injuries, emotional injuries, mental anguish, suffering, and distress.

325. Plaintiff suffered severe distress and anguish so serious and of a nature that no reasonable man or woman would be expected to endure.

COUNT V: FRAUD

326. Dr. Durrani made material, false representations to Plaintiffs and his insurance company related to Plaintiff's treatment including: stating the surgeries were necessary, that Dr. Durrani "could fix" Plaintiff, that more conservative treatment was unnecessary and futile, that the surgeries would be simple or was "no big deal", that Plaintiffs would be walking normally within days after each surgery, that the procedures were medically necessary and accurately reported on the billing to the insurance company, that the surgeries were successful, and that Plaintiffs were medically stable and ready to be discharged.

327. Dr. Durrani also concealed the potential use of Infuse/BMP-2 and/or Puregen in Plaintiff's surgeries when he had a duty to disclose to Plaintiffs his planned use of the same.

328. These misrepresentations and/or concealments were material to Plaintiffs because they directly induced the Plaintiff to undergo his surgeries.

329. Dr. Durrani knew or should have known such representations were false, and/or made the misrepresentations with utter disregard and recklessness as to their truth that knowledge of their falsity may be inferred.

330. Dr. Durrani made the misrepresentations before, during, and after the surgeries, with the intent of misleading Plaintiffs and Plaintiff's insurance company into relying upon them. Specifically, the misrepresentations were made to induce payment by the insurance company, without which Dr. Durrani would not have performed the surgeries, and to induce Plaintiffs to undergo the surgeries without regard to medical necessity and only for the purpose of receiving payment.

331. The misrepresentations and/or concealments were made during the Plaintiff's office visits at Dr. Durrani's offices at Christ Hospital.

332. Plaintiffs were justified in his reliance on the misrepresentations because a patient has a right to trust their doctor and that the facility is overseeing the doctor to ensure the patients of that doctor can trust the facility.

333. As a direct and proximate result of the aforementioned fraud, Plaintiff did undergo surgery, which was paid for in whole or in part by Plaintiff's insurance company, and suffered all damages requested in the prayer for relief.

COUNT VI: SPOILIATION OF EVIDENCE

334. Dr. Durrani willfully altered, destroyed, delayed, hid, modified and/or spoiled ("spoiled") Plaintiff's records, billing records, emails, paperwork and related evidence.
335. Dr. Durrani spoiled evidence with knowledge that there was pending or probable litigation involving Plaintiff.
336. Dr. Durrani's conduct was designed to disrupt Plaintiff's potential and/or actual case, and did in fact and proximately cause disruption, damages and harm to Plaintiffs.

COUNT VII: LOSS OF CONSORTIUM

337. At all times relevant, the Plaintiffs were married.
338. As a result of the wrongful acts and omissions of Dr. Durrani, Plaintiffs were caused to suffer, and will continue to suffer in the future, loss of consortium, loss of society, loss of affection, loss of assistance, and loss of conjugal fellowship, all to the detriment of Plaintiffs' marital relationship.
339. All the aforesaid injuries and damages were caused proximately by the acts and omissions of Dr. Durrani.

PRAYER FOR RELIEF

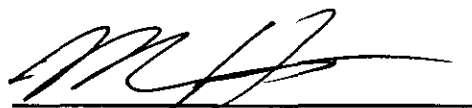
WHEREFORE, Plaintiffs requests and seeks justice in the form and procedure of a jury, verdict and judgment against Defendants on all claims for the following damages:

1. Past medical bills;
2. Future medical bills;
3. Lost income and benefits;
4. Lost future income and benefits;

5. Loss of ability to earn income;
6. Past pain and suffering;
7. Future pain and suffering;
8. Plaintiffs seeks a finding that his injuries are catastrophic under Ohio Rev. Code §2315.18;
9. All damages permitted under Ohio Products Liability Act R.C. § 2307.71-2307.80 and all other applicable law;
10. All incidental costs and expenses incurred as a result of his injuries;
11. The damages to their credit as a result of his injuries;
12. Punitive damages;
13. Costs;
14. Attorneys' fees;
15. Interest;
16. All property loss;
17. Loss of Consortium
18. All other relief to which he is entitled including O.R.C. 1345.01

Based upon 1-18 itemization of damages, the damages sought exceed the minimum jurisdictional amount of this Court and Plaintiffs seeks in excess of \$25,000.

Respectfully Submitted,

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Matthew Hammer (0092483)

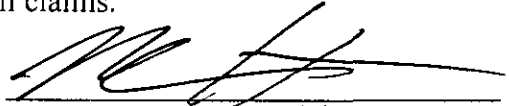
Lindsay Boese (0091307)

Attorney for Plaintiffs

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Independence, KY 41051
Phone: 513-729-1999
Fax: 513-381-4084
scollins@ericdeters.com

JURY DEMAND

Plaintiffs makes a demand for a jury under all claims.

A handwritten signature in black ink, appearing to read 'Matthew Hammer', is written over a horizontal line.

Matthew Hammer (0092483)
Lindsay Boese (0091307)